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ABSTRACT

This discussion focuses on the growing trend in deaf education toward bilingualism/biculturalism, with special emphasis on schools for the deaf in Canada. American Sign Language and la Langue Signes Quebecois on the one hand and English and French on the other are used as examples of bilingualism. Biculturalism is seen in the deaf individual's participation in both deaf and hearing cultures around the world. Theoretical assumptions of monolingual/monocultural approaches are contrasted to those of bilingual/bicultural education. Trends at specific schools in Canada, the United States, and Sweden are examined. An evolving paradigm which sees English as a second, rather than first, language for people with deafness is noted, as are trends toward increased community support for deaf bilingual/bicultural education and for general bilingualism. Trends in research are also identified, including new insights into how deaf children read and a paradigm shift which views deafness as a difference rather than a deficiency. Theoretical aspects of bilingualism are reviewed and a new model of deaf education is formulated. Specific implications of this model are drawn for families and for universities. An appendix summarizes course requirements in 33 programs for preparing teachers of individuals with deafness in the United States and Canada. (Contains 47 references.) (DB)

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Association of Canadian Educators
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BILINGUAL/BICULTURAL DEAF EDUCATION IS APPROPRIATE

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Abstract

Deaf bilingualism/biculturalism exists as a natural phenomenon in civilized countries. In this paper, American Sign Language (ASL) and English are used as examples of Deaf bilingualism; la Langue Signes Quebecois (LSQ) and French are among others. Deaf biculturalism includes and emphasizes the experience of becoming part of both Deaf and hearing cultures. The nature of this experience implies that Deaf biculturalism is universal.

"Deaf Bilingual and Bicultural Education is Appropriate", the title of this paper, emphasizes that a trend away from the traditional monolingcultural education for the deaf toward a bilingual/bicultural deaf education (DBiBi education) is consistent with a significant philosophical shift during the era since the 1960's. This shift is from an assumption that the nature of human beings is observable, measurable, and controllable toward an assumption that it should not be but appreciated.

DBiBi education basically reflects the real-life experiences of Deaf people in any civilized society. This is emphasized as appropriate for Deaf individuals, as well as for those hard of hearing and deafened individuals who find regular public school education inaccessible due to communication barriers.

Monolingcultural deaf education emphasizes English as the exclusive language of instruction and the "hearing culture" as typically emanated through hearing teachers' "socio-cultural standards". This education is criticized when it is imposed as the exclusive choice for all such individuals. Parents are encouraged to realize that the education that is good for their hearing children is not necessarily good for their deaf children. Parents, professionals and Deaf individuals are encouraged to gain an insight into and appreciate the remarkable phenomenon of Deaf bilingualism and biculturalism.

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Introduction

Probably the best way to gain an insight into the remarkable phenomenon of human bilingualism and multiculturalism is through Deaf bilingualism, e.g., American Sign Language (ASL) and English, and Deaf biculturalism, Deaf and hearing cultures. Linguistic pairings such as Langue des Signes Quebecois (LSQ) and French, Swedish Sign Language and Swedish are among others that exemplify Deaf bilingualism around the world. In this paper, ASL and English constitute mere examples of Deaf bilingualism. Unlike hearing bilingualism, e.g., spoken English and French, Deaf bilingualism seems to emerge and thrive without support at home and school since most Deaf children's teachers and parents do not know ASL. Deaf students generally acquire ASL through social interaction while struggling to acquire aural/oral, signed and/or printed English communication methods which are typically promoted at school (Mason, 1990). Through my acquaintance with thousands of deaf adolescents and adults, I have noticed that most of them tend to use ASL and have more confidence with printed English than oral and/or signed "quasi-English". As examples, Signed English, Manual English, Pidgin Signed English, and other variations of "English-based" signed systems (cited in Wilbur, 1991) are deemed misnomers. Instead, these should be considered as examples of quasi-English (or even pseudo-English). Quasi-English refers to the type of English Deaf students and their hearing contact persons attempt to use with an assumption that it is as "linguistically true" as the standard oral English hearing people typically use. However, deaf or Deaf individuals tend to acquire and use or revert to ASL, and hearing individuals tend to revert to oral English for spontaneous and meaningful conversation on their own volition (personal observation). These tendencies should be construed to suggest that such quasi-English representations are inherently inferior to either the standard oral English of hearing people or the ASL of Deaf people.

A definition for Deaf bilingualism, therefore, should start with ASL and printed English even though they appear to be

linguistically dissimilar. The ability of the Deaf to use these languages should manifest the remarkable phenomenon of human bi-/multilingualism which is an integral aspect of cultural context.

One of the ways to understand and appreciate Deaf biculturalism is through identifying and categorizing the attributes of Deaf and hearing cultures. The Deaf tend to see and sign ASL and hearing people tend to hear and speak English; these tendencies exemplify the fundamental attributes that distinguish Deaf and hearing cultures. Hearing culture becomes a definable phenomenon when its attributes are compared with those of Deaf culture. The distinctive characteristics of Deaf and hearing humours and poems are best expressed in their original language and cultural context. Deaf and hearing people have different social rules that can be traced to a basis in the different sensory orientation. Hearing people, who acquire ASL and interact/communicate with Deaf people, should eventually gain an insight into the uniqueness of Deaf culture and the phenomenon of Deaf bilingualism and biculturalism (BiBi or DBiBi).

There are individuals who do not recognize and/or accept the reality of this phenomenon. Some professionals and/or laypersons involved in deaf education are among such individuals. Typically they would insist that Deaf students learn one or another variation of aural/oral and/or signed English-based communication methods and the sociocultural values of hearing people. I call these people "monolingculturalists".

Monolingculturalists normally control every aspect of deaf education and rarely interact/communicate with Deaf children when they are older or with Deaf adults outside their offices and/or classrooms. Because of this they are not expected to have a deep insight into and appreciate the phenomenon of Deaf bilingualism and biculturalism. Those who actively reject ASL, Deaf culture, Deaf bilingualism and biculturalism, and promote monolingcultural values should be called "monolingcultists".

On the basis of the above and following observations, monolingcultural education should not remain as the exclusive choice for Deaf children: (a) the low English-based literacy

levels of the Deaf (see for example, Johnson, Liddell, & Erting, 1989); (b) the quality of communication between hearing professionals and Deaf students being inferior to that between hearing professionals and hearing students, or Deaf professionals and deaf students (Mason, 1990); (c) the tendency to teach, train or lead young Deaf children and then avoid the same individuals when they are older (a common observation); (d) a study of several existing teacher of the deaf preparation programs suggest that many emphasize clinical, rather than pedagogical-educational, objectives (see Appendix A; & Mason, 1994); among others.

Objective of this Study

The main objective is to show that a transitional shift from traditional monolingcultural deaf education toward bilingual bicultural deaf education (DBiBi education or BiBi deaf education) since the 1960's is consistent with the phenomenon of Deaf bilingualism and biculturalism. This shift appears to be in line with a major paradigmatic shift--from an assumption/emphasis that aspects of human behaviour are observable, measurable and controllable towards an assumption/emphasis that humans are complete with their own personalities and are an integral part of the world (Heshusius, 1992; Knudtson & Suzuki, 1992). The following observations and trends are mere manifestations this shift: (a) a DBiBi education model is being formulated, adopted and implemented at a number of schools for the deaf in North America (personal observation and contact with people at the schools); (b) this author's personal experience as a former teacher at a school where monolingcultural values were emphasized in the 1960's and the incorporation of DBiBi education values starting in the 1980's; (c) emerging and evolving bilingual theories (Lambert, 1974, & 1975; & Cummins, 1977); (d) research focus on English-based language communication skills expanding or shifting to include DBiBi education (Wilbur, 1991); and (e) recent legislative resolutions like the Bill 4 passed in the Ontario legislature in 1993 implying public recognition and acceptance of the trend toward DBiBi education. An attempt will

be made to incorporate the above observations and trends as a basis for delineating underlying principles of a DBiBi education model and to set forth enabling recommendations.

Theoretical Assumptions of Monolingcultural and BiBi Education

On the basis of the author's primary and secondary observations in combination with various literatures, monolingculturalists assume that Deaf children need English-based communication and language skills in order to acquire a language. They rarely recognize that ASL could be a viable language of instruction; therefore, they are "legitimately" absolved from having to learn and use it as their second language. They would sooner tolerate or approve quasi-English oral and/or signed communication systems and downplay the importance of ASL (personal experience and observation). Because of the monolingculturalists' overwhelming power with English as compared with Deaf students' limited English abilities, communication between them is likely teacher-controlled, rather than interactive, spontaneous and meaningful. Teaching students language/communication skills, rather than sharing a language with them, often constitutes the basic educational objective in a monolingcultural school for Deaf students. A survey of the contents in 29 graduate-level teacher of the deaf preparation programmes in North America shows that a considerable amount of program time is set aside for teacher candidates to learn to teach English-based language and communication skills (Mason, 1994).

DBiBi proponents assume that Deaf children are persons with bilingual capabilities, rather than those with communication and language deficiencies. They assume that the students' peer/social language, e.g., ASL, is essential in any type of school activities including those that emphasize experience with English. The implication is that professionals who believe in and use ASL likely become effective in a DBiBi school. Interactive, spontaneous and meaningful communication with students is more likely when the teachers and students can understand and be understood in their interactions.

Reflections on Certain Monolingcultural Education Approaches

There is a belief that Deaf students' "language consciousness" may be attributable to certain monolingcultural educational objectives or strategies that interfere with the students' spontaneous language acquisition and use. When a Deaf student is unable to enjoy interactive and spontaneous conversation in one or another type of English, it may be reasonable to suggest that she/he is having a crippling language consciousness.

Language consciousness may manifest itself when a student knows that her/his teacher would assess how well the student expresses in grammatically or acoustically acceptable structures with less interest in what they say (personal experience and observation). As another type of language consciousness, the student do not ask question or make comments while being aware that her/his teacher could not (or would not) understand them. Such "school-induced" crippling language consciousness is believed to be less likely to happen in a DBiBi school because mutual respect for the two languages is expected.

Trends at Schools for the Deaf

Schools for the Deaf in North America are in various stages of formulating and implementing DBiBi educational models. Much of the information on the following schools is based on school-issued materials and discussion with various people associated with the schools until the winter of 1992. Changes in personnel or directions after that time are not included in this paper. The following schools were selected mainly because I am more familiar with them than with others.

Alberta School for the Deaf (ASD), Edmonton. Until the fall of 1991, I was a long-time educator at ASD. ASD has evolved from a traditional oral school in the 1950's into a DBiBi school in the 1990's. This trend coincides with a significant change in the ratio of Deaf to hearing teachers, from 1 to 25 (1 Deaf to 25 hearing teachers) in the 1960's to 14 to 12 in the 1991-1992 school year. Over this period of time, the quality of communication between hearing and deaf individuals associated

with the school has improved considerably. In recent years many more hearing parents have enough confidence with ASL and insight into Deaf culture to have conferences with Deaf teachers without having to rely on interpreters. This contrasts sharply with the difficulty of trying to communicate with oral English or signed/fingerspelled English of earlier decades. The ASD school environment is becoming accessible to Deaf students and colleagues; hearing professionals normally switch from speaking to signing when deaf individuals are within the eyeshot of their conversation. In earlier times, they simply ignored them and continued with their spoken conversation.

Although ASD Deaf and hearing teachers do not team teach in the same classroom, they work toward common goals in various ways. A Deaf teacher leads discussion sessions on political and environmental issues in ASL; students ask questions and take part in discussion. They read more about the issues in newspaper articles before or after class sessions. Hearing teachers lead other types of learning activities on their own; they may expand on the discussion sessions. By recognizing and appreciating their own and the others' strengths, Deaf and hearing teachers work together. Elsewhere at the school, grade 5 students work on translating stories originated in ASL into written English. In the senior high school, grade 10 students "digitalize" themselves in the computer monitors while studying interactive computer-video technology. They also earn credits for grade 12 ASL courses and grade 12 language arts (English) courses which are recorded on their official Alberta Education transcripts. According to the ASL-using Deaf ASD principal (Joe McLaughlin), 16 out of 21 ASD students passed grade 12 provincial English examinations between 1986 and 1992, and several ASD students have passed grade 12 Biology and Mathematics provincial examinations since 1990. ASD staff do not mark such provincial examinations. Although it is difficult to establish causal relationships between DBiBi education and such academic accomplishments, it clearly shows that the students perform well in the ASD

environment which is, in essence, a DBiBi environment rather than a monolingcultural environment.

Although parents and ASD staff do not necessarily work together in the same activities, they share common DBiBi goals. The ASD Community Council has been raising funds and purchasing TTY and TV decoding devices for ASD students since the 1980's. Conceivably, the parents' efforts enhance the students' experience with printed English; in addition, it is noteworthy that many of the parents use ASL with their children and Deaf teachers.

ASD teachers are generally active in community activities. As an example, Sue Bailey, Charmaine Letourneau, Joanne Robinson, and Kathy Dolby proposed to, and helped Grant McEwan Community College (GMCC) establish ASL and interpreter training programs in 1984 and 1986 respectively. Hearing parents and siblngs of Deaf students at ASD have been acquiring ASL and insight into Deaf culture and, incidentally, into Deaf bilingualism and biculturalism.

E.C. Drury School (ECD), Milton. ECD became a DBiBi school in a very different way. In 1988, the Ontario Association of the Deaf successfully lobbied for a province-wide review of education for deaf and hard of hearing children. The review resulted in significant changes at ECD. In 1989, the Ministry of Education task force report (M.O.E., 1989, pp.161-2) recommended that ASL be allowed as a pilot language of instruction at the school. The ECD transformation into a BiBi school was rapid. The ratio of Deaf to hearing teachers changed from 6 to 72 (1:12) in 1989 to 19 to 59 (1:3) in 1992. A team teaching model was implemented with three pairs of Deaf and hearing teachers accepting the challenge of teaching together in the same classrooms. The walls between their classrooms were torn down and their separate classes combined into a larger class. This team teaching approach has merits; one of them is that their students are able to observe how Deaf and hearing adults work together in various activities and learn more about Deaf-hearing cultures.

The ECD communication policies have been revised more substantially than in the earlier decades. Instead of revising from one variation of English-based oral/signed communication methods to another, the present revision involved the addition of ASL as a language of instruction. Many hearing professionals find this substantial revision much more challenging than the need to adjust between variations of English-based methods or systems.

Since ASL is no longer discouraged, students and adults are experiencing much greater freedom in communication and are taking on academic challenges with more confidence. Students are no longer required to restate or rephrase their ASL into signed or oral English in their dialogue with ECD professionals. Students with oral language abilities still speak with hearing teachers but learn to switch to ASL with their peers.

ECD also has a unique home support program for the families of children from preschool ages up to grade 3. Deaf teachers visit and discuss with the parents with or without hearing colleagues. This program also gives parents various opportunities to gain insight into how hearing and Deaf adults interact. A Deaf advocacy officer (Joanne Cripps) plays an important role in enhancing communication between children and adults at home and at school. In the fall of 1991, a Deaf professional (Clifton Carbin) was appointed as a BiBi program director. The transition at ECD also recognizes that ASL-using Deaf adults have valuable role in the education of deaf children.

Early in the 1990, a group of parents organized and established the Ontario Association for Bilingual/Bicultural Deaf Education (OABBDE). They have been active in addressing various issues with a commitment to encourage an insight into and support the DBiBi education.

Indiana School for the Deaf (ISD), Indianapolis. For a number of years into 1992, ISD has been building an excellent reputation as a BiBi school through the leadership of Deaf and hearing BiBi coordinators (David Reynolds and Ann Titus). With their help, several schools in the United States and Canada have

been formulating and implementing BiBi educational models. In 1989, the ISD committee proposed an important 15-year plan with three 5-year cycles. The cycles are labelled "Awareness and Understanding", "Scope and Sequence", and "Implementation" (Reynolds and Titus, 1989). Considerable care was put in formulating and developing this long-term plan since DBiBi education is fundamentally and radically different from the more familiar monolingcultural education. Various ASL and Deaf culture activities have been organized to help the staff and students become familiar with the BiBi educational objectives. In the fall of 1992, students of the York University teacher of the deaf and hard of hearing education visited the school. They noticed plenty of interactive and spontaneous ASL-based communication between children and their teachers in the BiBi nursery, preschool, and grade 1-3 programs.

Although both BiBi co-coorindators have radically different professional background (deaf education and audiology, respectively), they share the same commitment and enthusiasm in implementing and supporting DBiBi education.

California School for the Deaf (CSD), Freemont. The Deaf-to-hearing ratio among teachers and the residential program counselors at CSD began to change in 1975 and became equal in 1992. The CSD educators' growing conviction that ASL had a legitimate role in deaf education was confirmed by the premises delineated in "Unlocking the Curriculum" (Johnson, Liddell, & Erting, 1989). It was one of the factors that helped set things in motion. The BiBi committee was set up in the spring of 1990 under the leadership of Marlon Kuntze (Deaf teacher) and Ed Bosso (hearing teacher) as BiBi coordinators in the following fall.

Many consciousness-raising and learning activities took place to help lay the foundation for school-wide understanding of the BiBi movement. These activities involved the four constituencies of CSD: parents of CSD students, staff, CSD students and the local Deaf community. That helped put CSD in motion to eventually become a bilingual-bicultural program. In the fall of 1991, the BiBi Management Team was established to

coordinate the administrative effort for the implementation of BiBi components and principles. The two-year "Plan of Action" was instituted as a way to ensure grassroot input in educational reforms (written communication from Kuntze, 1992). It constituted four phases: a) identification of values by each of the four aforementioned constituencies of what people believe Deaf education should be based on as well as consolidation of these values to develop a Statement of Values; b) the development of an evaluation instrument using the stated values as a guide; c) the evaluation of how much the school's program reflects the values that have been identified; d) the recommendation of program changes based on the data of evaluation. The BiBi coordinators also produced CSD BiBi newsletters to answer questions related to BiBi, share information on various aspects or issues of the BiBi movement as well as what is happening at CSD in respect to the BiBi movement. The BiBi coordinators likewise had responded to various public requests to know about the BiBi movement through both personal contacts and professional presentations and workshops. TESOL (Teaching English to Speakers of Other Languages) has been one professional organization that provides information sharing and networking.

The Learning Centre (TLC), Framington. Early in 1970, Harlan Lane, a professor at Northeastern University, Massachusetts recruited Marie Phillips, a native ASL user, to do ASL research and to teach ASL classes there. She became one of the first Deaf adults to teach ASL in a major university (together with Ella Mae Lentz) outside of Gallaudet. Eventually she opted to work at TLC in 1985. She taught staff, parents and students ASL and Deaf culture and eventually became part of the administrative team. Following communication policy revision in 1985, ASL was used more in the classroom along with the other options of simultaneous communication.

Then in the summer and fall of 1988 the entire TLC staff took part in a series of workshops led by M.J. Bienvenu and Betty Colonomons of the Bicultural Center. Staff examined their personal values and confronted issues of oppression and

majority/minority politics in Deaf education (Philip and Small, 1992). This led to an all school staff retreat on bilingual bicultural education in the fall of 1988, commitment to becoming a bilingual bicultural school and the appointment of Marie (Deaf linguistic anthropologist) and Anita Small (hearing sociolinguist) as BIBI coordinators in the winter of 1989. They held a parent workshop, parent discussion groups, staff inservices, Deaf and hearing staff discussion groups and staff training in cultural mediation. The TLC advisory board developed a mission statement, program goals and a bilingual bicultural maintenance and pre-maintenance program model. They had been working on curriculum development, improving student staff ratios, making Deaf role models available, and other objectives. ASL-based communication became the language of instruction and of the environment on campus. English (written/read) is taught as a second language and emphasis is placed on content and meta-cognitive discussion through ASL. The parent infant program is run by the first Deaf coordinator in the country, Nancy Vincent. Their residential program has expanded from one to five dorms in three years. The Deaf-hearing staff ratios have changed from less than 1:10 to about 4:10 since the 1980's.

Manitoba School for the Deaf (MSD), Winnipeg. In 1991 the advisory committee of the school resolved to support the decision that the Manitoba School for the Deaf (MSD) be allowed to evolve into a bilingual bicultural school; the majority of the staff supported the decision too. A Deaf Bilingual Bicultural Officer (Len Mitchell), has been coordinating a committee of four parents, two students, four Deaf community members and nine staff members. Recently, a mission statement with recommendations for policy revisions was formulated. This committee have been reviewing language and communication policies and guidelines as well as exploring various technology possibilities. An electronic communication system was installed in various places at the school; this system is more accessible to deaf individuals at MSD than the sound-based traditional public address system.

Center Jules Leger (CJL), Ottawa. This CJL program was established for deaf students of francophone origins in 1991. Since starting as a volunteer in 1986, Roger St. Louis, a Deaf francophone, has been a prime mover involved in helping the deaf education program at CJL transform into a DBiBi program. About the time he started, there was a plan to implement signed French as the policy communication method of instruction for Deaf students in the program. Instead, Roger started teaching Langue des Signes du Quebecois (LSQ), and by 1990 or 1991 he has taught the language to everyone involved at CJL. Eventually CJL became a bilingual bicultural educational program for the deaf.

In the spring of 1993, this author saw high school-age Deaf students taking using LSQ and printed French and taking high school courses. Several of them with oral education background were already in various stages of acquiring and using LSQ and becoming stout supporters of the language. One of the more academically-inclined students enjoy doing well with printed French, printed English, LSQ and ASL!

Other schools. Schools and deaf education programs throughout North America are in various stages of adopting or implementing DBiBi education. Several schools including Sir James Whitney School (SJW) in Belleville, Ontario are adopting DBiBi approaches in one or more classrooms.

Sweden. Sweden has a policy that requires the use of Swedish Sign Language as a language of instruction at the schools for the deaf. Swedes recognize that Swedish Sign Language is the first language of Deaf persons in the country and expect deaf children to master this language with opportunities to acquire printed Swedish. Swedes use "two-language", rather than "bilingual" to identify with their educational philosophy.

In 1973, Brita Bergman, a sign language linguist, determined that signed Swedish was inefficient; consequentially, it was quickly phased out of the Swedish schools. Davies (1991) cited Bergman's observation: "With lip movements, signed Swedish works well for those who, like late-deafened individuals, already know Swedish, but she asserts that there is so little information on

the lips that a deaf child still will not really learn the makeup of the word until he learns to read" (p.8). This implies that the monolingcultural education, that may be appropriate for deafened or hard of hearing individuals who have considerable experience with Swedish, is not necessarily appropriate for deaf individuals who do not. Davies (1991) cited "deaf children around the world are able to completely master natural sign languages, such as Swedish Sign Language, before the age of three" (p.8). This observation paves a way for the implementation of the two-language educational approach involving Swedish Sign Language and printed Swedish.

An Insight into the Evolving Deaf Education

Evolving communication policies at schools. Since the 1950's, communication policies such as exist at the Alberta School for the Deaf have been under revision. The following revisions, that also have occurred in various other educational settings for deaf students throughout North America, are categorized according to the following time periods. In the 1950's, the policy dictated that the oral method of communication with or without fingerspelling constituted the language method. In the 1960's, policy moved to require combined fingerspelling with speaking as the revised method of instruction. In the 1970's, policy again changed to require one or another variation of English-based or English-like signed systems, usually in combination with speech, as the communication method; however, ASL remained banned as it was in earlier decades. In the 1980's, policy again shifted so that ASL was allowed "only to clarify" some lesson concepts; otherwise, it was discouraged or banned. Finally, starting in 1989, ASL was legitimately allowed as one of the languages of instruction as part of any official English-based curriculum in several schools for the Deaf.

In retrospect, this reflects a philosophical paradigm evolving into another over the thirty year period of time. One paradigm indicates that Deaf children are assumed to be lingually deficient unless they acquire and use one or another type of English-based or English-like communication methods. A different

paradigm indicates that Deaf children already have a highly sophisticated peer/social language like ASL and that they merely need to acquire English as another language.

Teachers as a Significant Factor. The future of DBiBi education apparently depends on hearing teachers' willingness or ability to acquire ASL and the balanced Deaf-to-hearing teacher ratio. Experience at ASD indicates that the balanced ratio is an important factor in improving relationships between Deaf and hearing teachers. This implies that hearing teachers' attitude is not a problem; their limited opportunity to acquire and use ASL and gain insight into Deaf culture is. Davies (1991) quoted Guinella's comment about the Swedish teachers:

> I guess if I were to wish for something it would be to improve the teachers' sign language skills. That is the first thing, really. If you had asked me what was really needed five years ago, I would say, to change the attitude. But not today. I think the attitude really has changed. And I think most of the teachers of the deaf really want to be good signers. I think that's the thing they dream about. They really want to be, and they really want to use that in education, and they want to work with translations and things like that, but they don't have the guts because they feel, "My sign language isn't good enough. I have to improve myself first." (p.15).

Interaction between Deaf and hearing adults. In the 1960's and 1970's, very few hearing parents of young deaf children communicated with Deaf adults' children as if some kind of professional edict kept them apart. Since the 1980's, communication between these two groups has been improving; many hearing parents, at least at ASD, do not need interpreters in their conferences with Deaf teachers. This may be attributable to parents' appreciation of ASL and deeper insight into Deaf culture.

During the 1970's and 1980's, when students and school staff were required to use one or another variation of English-based communication systems (oral, fingerspelled, and/or signed),

communication between hearing and Deaf individuals was extremely awkward and difficult (personal observation). With limited ASL abilities, hearing professionals tended to talk to Deaf children; they often grinned and nodded as if they understood what the students sign to them. In recent years the professionals' English-based signing has been slowly replaced with ASL.

This trend is consistent with a significant paradigmatic shift--toward holism which underscores that the interplay between a person and the world requires inter-active and meaningful communication.

Trends in Community Support for DBiBi Education

Winnipeg, Manitoba is the location of several different successful community-coordinated DBiBi programs. The Interagency Bi/Bi Committee holds regular meetings and provides an open forum to the following agencies/service providers: Sign Talk Child Care, Deaf Centre Manitoba, Manitoba School for the Deaf, Winnipeg Community Centre of the Deaf, Sign Talk Development Project, Society for Manitobans with Disabilities (Preschool Program and Deaf Adults Service), Red River Community College Deaf Literacy Program and Interpreter Training Program. This committee supports the development and implementation of bilingual-bicultural programming with emphasis on the use of ASL in supporting English-based literacy programs. Ferguson (1992) attributed the success of these programs to the ability of the people to transform the Bilingual/Bicultural educational theory into applicable, manageable and successful experiences. Deaf and hearing professionals and laypersons work together in providing a program for families with young Deaf children and another one for Deaf adults. They shared their experiences at the TESOL '93 in Atlanta, Georgia.

Trends in Support for General Bilingualism

The following two groups of people of different linguistic background basically confirmed that humans have an ability to acquire and use more than one languages. In 1965, a group of Anglophone mothers in Quebec knew that their children needed to be able to speak French and, with their help, a French immersion

program was established and eventually became successful (Stern, 1984; personal communication with Jones, 1992). In 1971, Ukrainian mothers successfully lobbied for an amendment in the Alberta School Act. This amendment allows instruction in languages other than English and French, the official Canadian languages, up to 50% of school time (Jones, 1984).

Trends in Research Focus

The 1960-1990 inclusive trend should be dubbed the Era of Deaf Renaissance, 400 Years Late. William Stokoe may be the most significant individual responsible for the onset of this era. His research on the signing phenomenon of Deaf people (Stokoe, 1960) essentially cracked the infrastructure of the monolingcultural education imposed on as the sole choice for all Deaf individuals. The following deaf education-related trends are introduced to show what has been happening since 1960.

Early research on the language Deaf used. The following examples suggest a shift from an emphasis on the "mechanics of language" toward an emphasis on the sociocultural/sociolingual aspects. Stokoe (1960) described the linguistic attributes of the sign language of the Deaf which eventually became well known as ASL. Conceivably, Stokoe's scientific analysis and description of the sign language was necessary in the 1960's when ASL was considered a "non-language" as compared with English. Subsequent studies done by Bellugi & Klima (1975), and numerous others throughout the 1970's (Wilbur, 1991), basically confirmed the language status of ASL.

Deaf bilingualism and biculturalism has become a more important research foci in recent years. The "shift" from research on ASL linguistics toward research on Deaf bilingualism and biculturalism is consistent with the shift away from the mechanistic thought (Israelite, Ewoldt, Hoffmeister, & Greenwald, 1989). Early research focussed on the "physical" and "mechanic" aspects of signing (Stokoe, 1960) is believed to be necessary in order to demonstrate that the signing has its own linguistic rules. Conceivably, once satisfied with the premise that the "linguistic tangibles" of the signing are proven as

linguistically consistent, it is natural to expand research to include other aspects of ASL-using deaf individuals' experiences and values. Cokely (1983) emphasized that information on Deaf culture be included in ASL courses for hearing people. Kannapell (1985) underscored the significance of language choice in self-identification. The timing of Cokely and Kannapell expanding their research foci to include culture and language choice is definitely not haphazard. It seems to be consistent with the shift from mechanistic paradigm toward a holistic paradigm since the past century (Heshusius, 1992).

Paradigmatic shift in recent decades. Earlier research emphasized quantification of samples to objectify a description of a phenomenon that the sample presumably represents. In recent years, a growing interest in qualitative research implies that researchers are dissatisfied with the "mechanistic interpretation of life" (Heshusius, 1992, p.4). Heshusius (1992) wrote, "In education, our theories, research, and our diagnostic, assessment and instructional practices do not have a life separate from our somatic, social, cultural, gender, and ethnic values, needs, and interests, but emerge from them" (p.18). Heshusius added that mechanistic thought proponents assume that "the dynamics of the whole can be understood from the properties of the parts" (p.20) while holistic thought proponents insist that "the properties of the parts can only be understood from the dynamics of the whole" (p.20). The shift, from an emphasis on Deaf children requiring to learn English-based communication skills toward an appreciation of Deaf bilingualism and biculturalism, seems to fit Heshusius's perception of the paradigmatic shift.

Since the 1960's, changes in research focus coincide with the trend in deaf education. Carver (1989) stressed that deafness should not be perceived as a deficiency. Traditional educators assume that Deaf children need lessons in English language skills (e.g., oral English skills) in order to have a language; this assumption might be considered consistent with a mechanistic view of how Deaf children acquire a language. This contrasts sharply with the position held by DBiBi proponents who

assume that Deaf children already have a peer language and are bilingually capable individuals. They are not seen as communication or language deficient.

Poplin (1988) illustrates a shift in the overview of theoretical learning disability (LD) models since the 1950's. The shift pattern is: medical model (1950's), psychological process model (1960's), behavioural model (1970's) and cognitive learning strategies (1980's). This paragraph implies that trends in other areas are similar to those in the "field of deafness".

New insight into how Deaf children read. Ewoldt (1984) destroyed a prevailing myth that Deaf children need oral processes as a pre-requisite for reading proficiency and confirmed her 1977 position that Deaf children should also be taught by Deaf teachers. Ewoldt (1985; in press) added that Deaf children exhibit literacy behavior similar to that of hearing children in a risk-free environment. Israelite (1988) and other researchers noted that the standardized tests that determine that students are poor readers have been criticized as inappropriate, esoteric and devoid of context. A study by Ewoldt (1978; 1981b) involved four profoundly, prelingually deaf children of hearing parents, ages seven to seventeen, from a residential school. The observation was that ASL had no adverse effects on the acquisition of English syntactic patterns through reading and that they could produce a high percentage of syntactically acceptable English sentences. "Unlocking the Curriculum" (Johnson, Liddell, & Erting, 1989) basically summarizes that the DBiBi movement is more appropriate than the traditional monolingcultural deaf education.

Limited research on DBiBi education. Israelite, Ewoldt, Hoffmeister, and Greenwald (1989) noted the paucity of research literature on the DBiBi education model relative to the amount on traditional deaf education. The 30-year transition has been rapid; it is a matter of time before research in deaf education catches up with the changes. There are signs that show a trend from a substantial emphasis on the linguistics of ASL in the 1960's and 1970's toward a greater emphasis on the sociocultural

and psychosocial aspects that involves the language. This trend is consistent with the following observation of the significant shift over the past several decades.

Implications of the paradigmatic shift for schools. In earlier times, teachers were seen as authoritative figures and students as subjects to shape into some type of better representation of human kind. The student's performance was not thought to be properly assessed unless it was observable, measurable, and manipulable in the "laboratory of education". In recent years teachers and students are seen more as the co-constitutents of the same classroom world, rather than as "educational practitioners" and subjects. Holly (1989) wrote, "During the 1970's and 1980's the shift was gradually from research on classrooms to research in classrooms and finally to research with teachers and by teachers" (p.84).

The previously discussed trends at schools for the deaf imply that teachers and deaf students have been experiencing fundamental changes in their relationship, particularly in the quality of interpersonal communication. Until the 1990's, hearing teachers in a typical school were not obliged to learn and share the deaf students' peer language, ASL. In recent years, more of them have begun to acquire and use ASL. Conceivably, their communication has been more interactive and spontaneous. Learning activities in classrooms no longer need to remain teacher-centered and controlled since the freedom in two-way communication implies that child-centered activities are more manageable and viable.

The holistic paradigm encompasses the integration of individuality and the world. This integration becomes a reality only when the individual feels that the world is accessible and meaningful to her/him and that s/he feels part of the world . The mechanistic paradigm emphasizes the segregation of individuality and focuses on its parts and systems (Heshusius, 1992; Knudston, & Suzuki, 1992). This implies that, according to the mechanistic thought, the individual feels that s/he is a "conditional member" of the world unless her/his "deficiencies"

have been addressed and deemed acceptable or rectified. In other words, this individual's total parts are perceived as equivalent or important as her/his overall personality and very existence.

Critical pedagogy philosophy (Freire, 1990) explains the dynamic power structure between teachers and students, between Deaf and hearing individuals in particular. In a monolingcultural school, the "critical pedagogy balance of power" between Deaf individuals and monolingculturalists is rarely, if ever, balanced because the monolingculturalists' overwhelming power with language choice imposed on the Deaf individuals. This premise is elaborated in The Mask of Benevolence (Lane (1992). Concerns about the tendency of professionals to be authoritative, patronizing, and oppressive in their relationship with Deaf individuals are expressed. As a general rule, hearing professionals rarely, if ever, interact with Deaf adults in community activities (personal observation). Conceivably, this lack can be inferred to suggest that they would feel powerless in an "ASL environment" unless they can communicate in ASL.

Taking Bilingual Theories and Models into Consideration

Deaf bilingual theories apparently do not appear in scholarly literatures. However, existing bilingual theories of hearing people may be taken into consideration on an assumption that Deaf and hearing bilinguals share many common experiences involving two or more languages.

The "affective filter hypothesis", proposed by Krashen (1982), stresses that anxiety, motivation and self-esteem affect the acquisition of a second language. A child who feels good about her/his home or peer language likely has a positive self esteem. Being able to understand and be understood is essential for self-esteem. In many traditional classrooms, Deaf children do not understand and are not understood basically because of fundamental differences in their language and their teachers' language and communication experiences and values. Monolingculturalists tend to hear and speak; deaf children tend to see and sign. This "miscommunication" is likely to have adverse impact the children's self-esteem since it is often the ground

for punitive action again the children at school. Goodman (1986) stresses that language exists in interaction between individuals that is meaningful and relevant to both; with this the miscommunication problem would likely abate or vanish.

The threshold hypothesis (Cummins, 1977) explains that adequate initial development of a first language (L1) is indispensible to the development of a second language (L2). This hypothesis may explain why Deaf children of Deaf parents and those of ASL-using parents enjoy successes at school (Paul, 1984). It is not as important to ascertain whether Deaf students are English-first, ASL-second or ASL-first, English-second as it is to recognize that they acquire and use a here-and-now basic language. For many of them, ASL is the here-and-now language and should be supported and nurtured as such. This hypothesis implies that this support enhances the acquisition of English, usually printed English.

Because it is generally easier for hearing parents and siblings to acquire ASL than for deaf children to acquire oral English, they should make efforts to acquire ASL. Other children who have become deaf after having acquired aural/oral English may become English first-ASL second bilingual. The threshold hypothesis definitely supports DBiBi education.

Additive/subtractive theory (Lambert, 1974, & 1975) ensures that L2 poses no threat to L1 in an additive environment but it does in a subtractive environment. In the additive environment a person's home and peer language and cultural values are respected and valued, and s/he will likely acquire and use English as L2 and become bilingually versatile, adaptable and empowered. In a subtractive environment the student's home/peer language and cultural values are undermined; her/his efforts to acquire a second language and gain an insight into others' cultural values are also undermined. The subtractive theory may explain why Deaf students' English-based literacy rate is low. When Deaf students are not allowed to use their efficient language, e.g., ASL, with their peers and teachers, they are certainly in an extremely subtractive environment.

The early total French immersion model (Dolson, 1984) has been successful for Anglophone children. French is exclusively used in all learning activities in the first grades and English is gradually introduced until the sixth grade when it accounts for at least 50 percent of instructional time (Lapkin and Cummins, 1984). A bilingual teacher adjusts her/his instructional language to the students' level of understanding and also understands the students' first language. By the end of the fifth to ninth year, the students have confidence with both languages as well as general academic work. Cummins (1984) noted that the outcome of the early total immersion programs has been consistently positive since its inception in the 1960.
This model works for the students whose first language (and culture) is not threatened but unconditionally respected; it is not appropriate for Deaf students as long as their language (eg. ASL) is threatened, undermined, trivalized and/or banned in English immersion (monolingcultural) program. In addition, it is not unusual for monolingculturists to tell hearing parents and siblings that signing should be discouraged at home! Studies (eg., Johnson, Liddell, and Erting, 1989) have confirmed that an English immersion program (i.e., monolingcultural program) is not necessarily appropriate for Deaf children.

Trends in public support

The elected representatives of national and provincial governments in Canada and other countries have been involved in supporting bilingual education movement.

Canada. In 1968-1969, the federal government of Canada passed the Official Languages Act and French and English became the official languages of Canada.

Manitoba. On December, 1988, Reg Alcock proposed resolution number 35: "Therefore be it resolved that the Legislative Assembly of Manitoba (Canada) recognize the cultural uniqueness of deaf Manitobians by recognizing American Sign Language as the language of the Deaf in Manitoba". Carried (Manitoba Hansard, Dec. 6, 1988).

Ontario. In 1989, the government of Ontario responded to the request of the Ontario Association of the Deaf and reviewed the education programs for Deaf and Hard of Hearing students. In the leglislative assembly of the Ontario government on March 22, 1990, Richard Johnson proposed Bill 112 to recognize ASL and LSQ as languages of instruction and heritage languages and incorporate it in the Education Act. After having unanimously passed its first and second readings, it died on the call for a general election which, incidentally, brought in Gary Malkowski as the first culturally Deaf person elected as a public representative. However, on November 27, 1990, Minister of Education, Marion Boyd, stated in the leglislative assembly that the Ontario government was committed to recognizing American Sign Language and la Langue des Signes Quebecois as optional languages of instruction and for learning in Ontario schools and programs and promised to work with organizations and individuals interested in Deaf education. Also two minister's advisory committees on Deaf education -- one anglophone and one francophone with representatives from the Deaf and Hard-of-Hearing communities, parents groups, school boards, the provincial schools and interpreters -- have been established to advise the minister on the implementation of ASL and LSQ as languages of instruction. The minister also granted the Teacher of the Deaf and Hard of Hearing training program to York University which started in August, 1991. David Mason became probably the first culturally Deaf professor employed full time in any Canadian university.

On July 21, 1993, Bill #4 that authorizes American Sign Language and Langue Signes des Quebecois as languages of instruction was passed into law and the Ontario Education Act is amended accordingly.

Alberta. On June 19, 1990, the Legislative Assembly of Alberta unanimously passed Bill Payne's motion number 216: Be it resolved that the Legislative Assembly urge the Government, given the cultural uniqueness of Alberta's deaf community and the linguistic uniqueness of American Sign Language, (i) to

recognize American Sign Language as a language of the deaf in Alberta; and (ii) to incorporate it into Alberta's grade school and post-secondary curriculum as an available language of instruction (Alberta Hansard, 1990, pp.2023-2029). This resolution is backed with the Alberta School Act amendment passed in 1972 (chapter S-3.1, 1988); this act authorizes instruction in a language other than English and French for at least 25% of the instructional day to a maximum of 50% as well as "second language courses".

The United States of America. The Federal Bilingual Education Act amended the Bilingual Act (1968) in 1974 and 1978 with: "the Congress declares it to be the policy of the United States, in order to establish equal educational opportunity for all children, to encourage the establishment and operation, where appropriate, of educational programs using bilingual educational practices, techniques, and methods (Grosjean, 1982, p.76). By 1983 bilingual education was permitted in all fifty states and all required the inclusion of English as a second language of instruction in all bilingual education (Ovando and Collier, 1985). Most state laws require that the transitional bilingual education includes a plan to enable the speakers of other languages to eventually acquire English as their second language. These laws intended for hearing bilinguals should be modified to reflect the true nature of Deaf bilingualism which is permanent, rather than transitional.

Trends at Universities

Gallaudet University. On April 30, 1990, Gallaudet University faculty approved "a working model" that is based on ASL and English bilingualism and multiculturalism, rather than Deaf bilingualism. The faculty agreed that the clear use of English and ASL is essential in all aspects of University life (Kannapell, 1990, p.69). There is uncertainty about the focus on multiculturalism instead of Deaf-hearing biculturalism. Does it encourage detraction from or circumvention of the need to address various sociocultural conflicts between Deaf and hearing professionals? Does this preclude a deeper insight into the

remarkable phenomenon of Deaf bilingualism and biculturalism? I believe the answer to both is affirmative.

University of Alberta, York University, Boston University, and Northeastern University. These four universities are among the growing number of universities where Deaf bilingualism is gaining recognition, typically starting with the introduction of ASL courses for students. The University of Alberta and York University offer ASL lessons through manual communication and sign language studies courses (respectively) as parts of their teacher of the deaf training programs. The University of Alberta, through Mike Rodda's, Mary Ann Bibby and Sue Boesen's leadership, became probably the first Canadian university to include ASL courses in a teacher of the deaf preparation program. Boston University, through Bob Hoffmeister's leadership, offers a complete ASL/English bilingual teacher preparation program. Northeastern University is among a number of other universities where ASL programs are offered.

Existing teacher of the deaf preparation programmes. The 1986 report of the program content of 33 teacher of the deaf training programs in North America (Appendix A) suggests that professionals involved with, or responsible for, the programs hold onto and profess the traditional monolingcultural values. These values are inconsistent with Deaf individuals' real life experiences and values, particularly those who experience greater successes with ASL than with oral English and seek out other Deaf individuals as they become older. The apparent unwillingness for the monolingculturalists to learn from the Deaf implies they are fighting the need to grow and change with the paradigmatic shift (previously discussed in this paper). Furthermore, according to the contents in the teacher training programs, the future teachers are being trained to become communication/language practitioners or clinicians, rather than educational teachers with abilities to enjoy interactive, spontaneous and meaningful communication with Deaf students.

Since the above mentioned study was completed in 1988, it is conceivable to presume that it represents the values of earlier

decades. It should be deemed increasingly outdated in the 1990's when the pedagogical values of bilingual approaches in education are becoming better understood.

Reflections on the Trends

Educators at the aforementioned schools, the evolving/-improving relationships between Deaf and hearing parents, the emerging "new breed" of researchers, and the legislative resolutions reflect the changing paradigm of the past three or four decades. Some educational professionals grow and change with time while others seem to hold onto outdated values.

DBiBi Educational Philosophy and Model Formulation

Underlying Tenets

1. DBiBi education does not begin and end in the classroom; it encompasses the entire world that involves Deaf students and anyone they are involved with -- inside and outside the classroom, in the residences, at home, and in the community.

2. DBiBi education encompasses ASL and Deaf culture, and English and hearing culture. The acquisition and use of ASL and English is essential as is mutual respect between Deaf and hearing cultural values. DBiBi education may exist in other regions like Quebec where LSQ and French constitute Deaf bilingualism with Deaf and hearing cultures biculturalism.

3. Since deaf children spontaneously acquire and use ASL as their peer/social language, it is supported and encouraged as a language of communication and instruction in all types of learning activities that include acquisition of English through meaningful activities.

4. Because printed English is more reliable than other English-based communication methods for Deaf students, it is an essential aspect of DBiBi education alongside with ASL. Since one or another variation of English-based fingerspelled, signed and/or oral communication methods is more elusive and difficult to acquire and use with confidence, students should not be restricted to any of the methods.

5. Deaf and hearing cultures are real phenomena as is Deaf biculturalism. Deaf and hearing individuals are encouraged to

explore, experience, discuss and appreciate similarities and differences between these two cultures.

6. Communication between students and adults (e.g., professionals, non-professionals and volunteers) is virtually non-existent unless it is accessible, interactive, spontaneous, and meaningful -- to the students. Likewise, education is deemed virtually non-existent without this type of communication.

7. Deaf children are entitled to be able to understand and be understood through a spontaneous language and communication method with many school mates and school personnel. This implies that Deaf children are entitled to attend school with other Deaf children the same way hearing children are entitled to attend school with other hearing children.

8. Although ASL/English interpreting support is rarely a satisfactory substitution for direct communication between two persons, it is essential in various situations involving ASL and non-ASL users.

9. The importance of hearing professional and lay persons' in a DBiBi school depends upon their ASL abilities and insight into and appreciation of Deaf culture.

10. The number of hearing professionals should be adjusted until it does not exceed the number of culturally Deaf professionals in any educational programs for Deaf individuals. This makes it easier to implement DBiBi educational objectives. Culturally Deaf persons are those who use ASL and appreciate Deaf culture values; they also interact with hearing people in various activities.

11. Deaf students should be able to handle age-appropriate educational challenges where they have spontaneous access to their peers and teachers through a common language like ASL. They should be able to reason, think critically and creatively, explore in the world and seek its meaningfulness, make decisions and accept responsibilities for them, develop intellectually and affectively, and seek personal and social independence.

12. Children with aural/oral English abilities continue to maintain or improve on them through working with hearing staff

members at school and family at home. They are not denied opportunities to acquire and use ASL.

13. Like hearing professionals and volunteers, parents, siblings, and relatives should be given opportunities to acquire and use ASL. Many of them do not realize that it is easier for them to acquire and use ASL than for Deaf children to acquire and use aural/oral English with confidence.

14. Barriers between hearing parents of young deaf children and Deaf adults, as well as between Deaf adults and hearing professionals, must be removed.

15. Ethnic cultures valued at home are respected and appreciated.

16. School administrators, educators, parents, and members of communities must believe in and support DBiBi education or risk a regression to restrictive monolingcultural education. They must become involved in supporting various activities that are consistent with DBiBi educational objectives.

17. Monolingculturalists need the courage to emanicipate themselves from the shackles of monolingculturalism in order to learn and appreciate that DBiBi education has benefits that may be non-existent in monolingcultural education.

Implications and Recommendations

Implications for families

Hearing parents and siblings should be informed that the number of hearing individuals taking ASL courses has been increasing drastically over the past several years. Angela Stratiy, Program Director at Grant McEwan Community College, Edmonton, Alberta informed me that there were 17 ASL classes with 270 students each day during a term in 1992. Kevin Struxness, a Deaf graduate student, informed me that 4,000 students take ASL classes in San Diego area each year. These two examples reflect a confidence in ASL as a reliable language that can help in improving communication and mutual respect between hearing and Deaf people. Rather than waiting for Deaf children to grow older, their hearing parents and siblings should acquire ASL and

gain a better insight into the Deaf child's experiences much earlier in the latter's life.

Implications for educational professionals.

Education is virtually non-existent unless it is accessible to Deaf children through spontaneous and meaningful communication, almost invariably through ASL. Thousands and thousands of Deaf children do not succeed with school-promoted communication methods and succeed with ASL. Educational professionals should ensure that Deaf children's education is not impeded due to prescribed communication and language restrictions. They should review and update the content of existing teacher preparation programs (Appendix A) and the teacher certification criteria like the 1986 version of Association of Canadian Educators for the Hearing Impaired certification standards. These programs and standards reflect the pre-1970 values and monolingculturalists' perspectives and values. These should be revised and updated to make at least a part of them become consistent with and supportive of Deaf individuals live as bilinguals in a bicultural world.

Recommendations for Universities

Faculties involved in teacher of the deaf training programs at universities throughout North America should review their programs -- in consultation with culturally Deaf adults. Professors interested in studying aspects of deaf education should recruit culturally Deaf individuals as colleagues, co-researchers and/or collaborative researchers, rather than just as subjects to study. Similarly, hard of hearing adults should be consulted for hard of hearing issues and/or be involved in dealing with them.

University policies should be amended to allow ASL as a language of instruction and a primary language of research (Mason, 1992) and support translations between ASL-based video-documentations and printed English materials. Culturally Deaf researchers can arrange to have English-printed text inserted on the videotapes. Policies at universities, community colleges and institutes of technology should also be adapted to make it

possible for Deaf students to have the option of choosing ASL, English, or both, in their programs.

Concluding Remarks

Deaf bilingcultural education involves two distinctive languages and incorporates both Deaf and hearing cultural values. Monolingcultural education emphasizes the pre-eminence of English and the teachers' personal and social/cultural values. DBiBi education is integrative as it encourages interaction and mutual respect between Deaf and hearing people, recognizes ASL and English as equal-status languages, and encourages awareness of similarities and differences between Deaf and hearing cultures. Monolingcultural deaf education becomes extremely segregative, particularly when a student is unable to acquire and use oral and/or signed English as her/his basic communication system and/or identify with her/his teacher's cultural values.

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Appendix A

Typical monolingcultural teacher of the deaf preparation programs emphasize many of the following requirements as listed by American Annals of the Deaf (March, 1988):

Education of the Deaf Course Requirements

Courses	Number of Programs out of 33 offering this course	Mean Number of Semester Hour
Audiology	33	3.20
Language development/ training for deaf	33	4.13
Practice teaching	33	9.10
Speech development/ training for deaf	33	3.60
Survey of deafness	32	3.24
Teaching methods, school subjects, curriculums, reading for deaf	32	4.35
Survey of exceptional children	31	3.09
Anatomy of speech and/ or hearing mechanism	29	3.06
Education of the deaf practicum	28*	3.06
Sign language	27	4.75
Aural rehabilitation, speechreading, auditory training	27	3.21
Phonetics	19	2.48
Assessment techniques	17	3.41
General language development	17	2.83
Behaviour management	13	2.90
Speech science	8	2.25
Media	8	3.13
Parent counselling	9	5.67

*includes two programs in which practicum is required but no credit is offered

About the Author

Dr. David G. Mason received BA (Gallaudet University), MEd (Western Maryland College) and PhD (University of Alberta). All his pre-university schooling was at Mackay School for the Deaf, an environmentally and educationally accessible residential school for the deaf in Montreal.
He has 30 years of experience as a teacher that included various supervisory and coordinating responsibilities at Alberta School for the Deaf and as an adjunct professor at the University of Alberta. Presently he is the Programme Director of the Teacher Preparation Programme in the Education of Deaf and Hard of Hearing Students at York University, Metro Toronto. He is probably the first Deaf individual, labelled as an "oral failure", ever to become a full-time professor in a Canadian university. He is a bilingual Canadian who uses American Sign Language and printed English.
He has been active in various types of provincial and federal organizations of and for Deaf and Hard of Hearing people. In addition, he has also served on community-based and professional committees, including those made up of only hearing individuals.